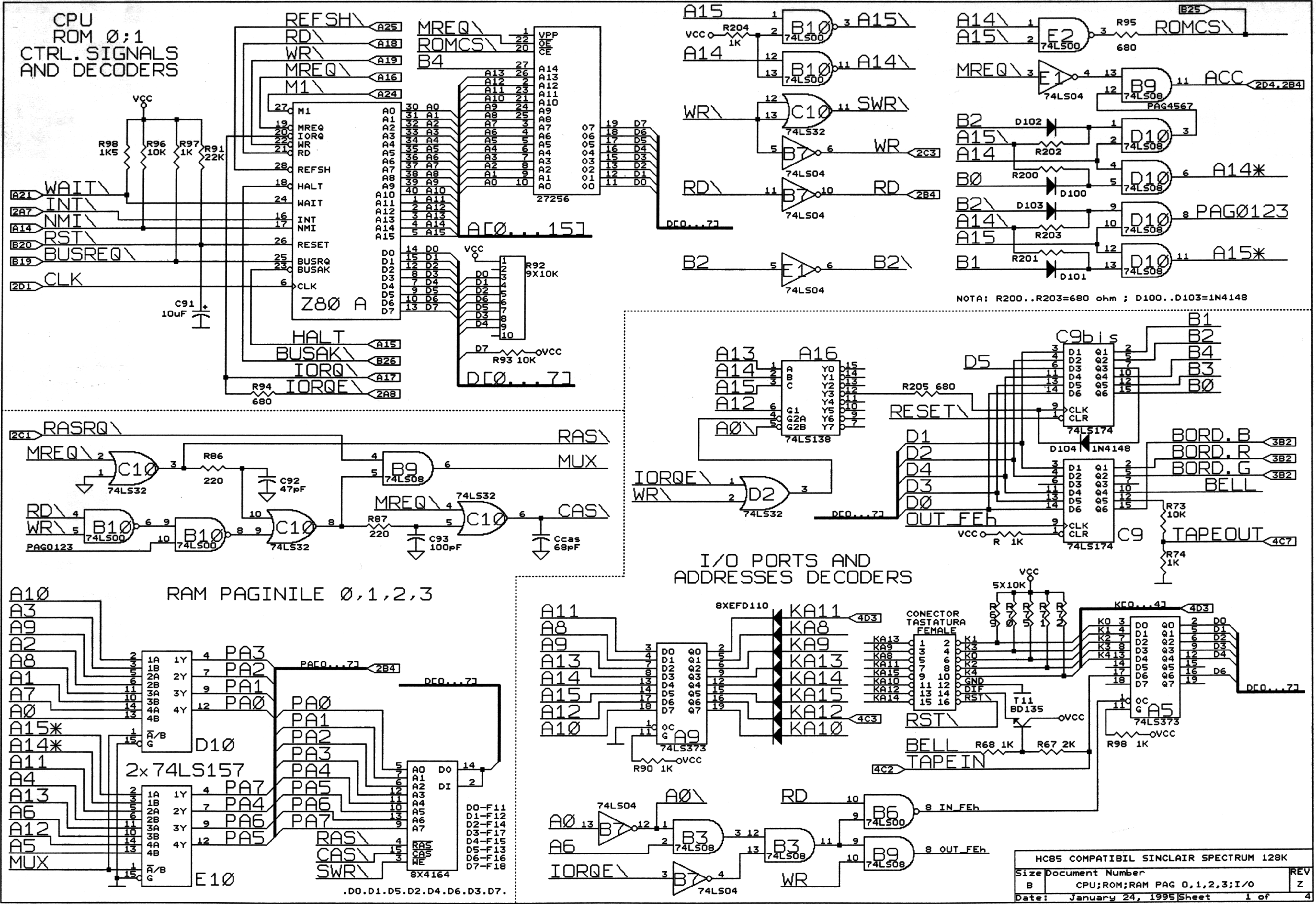
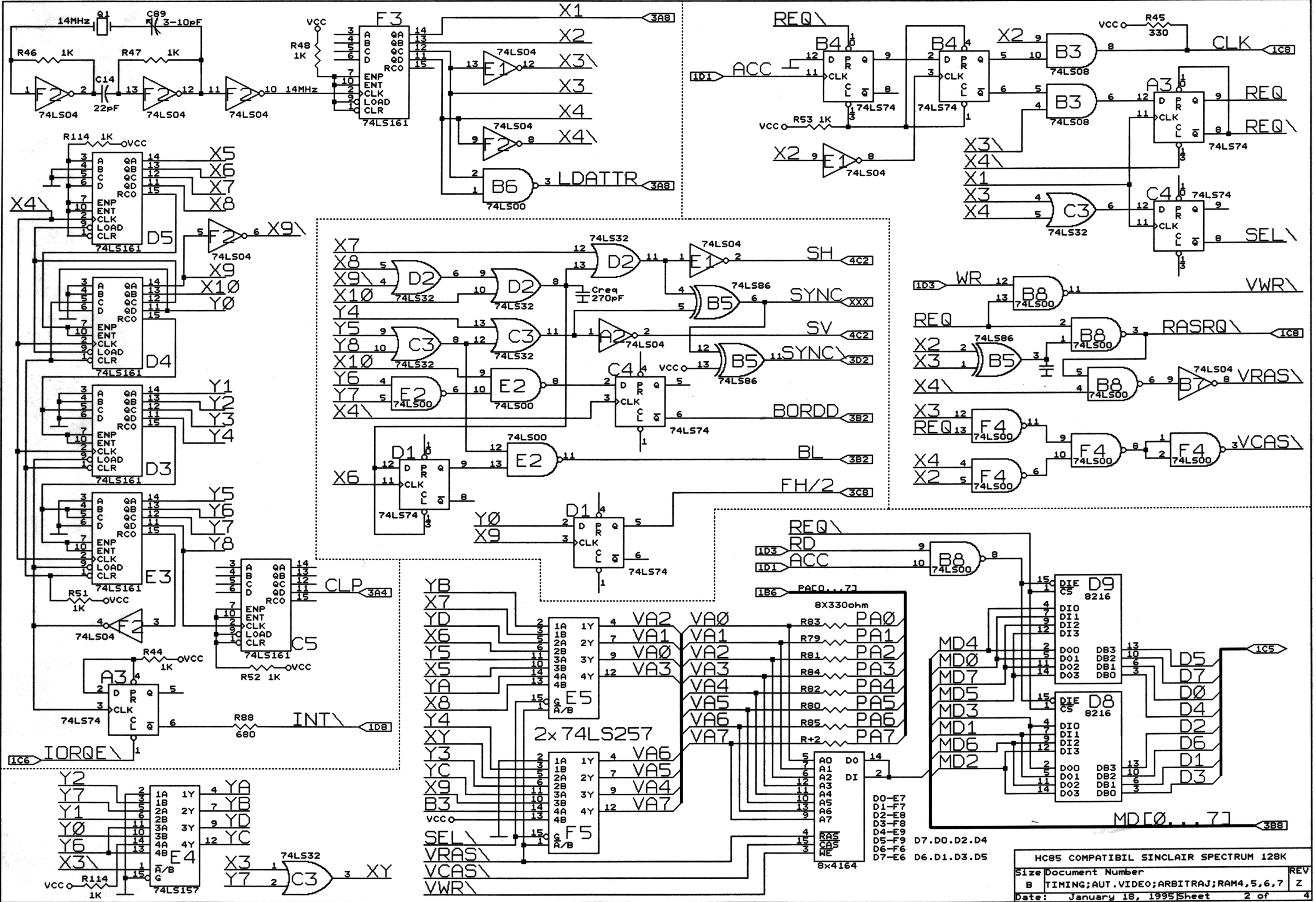
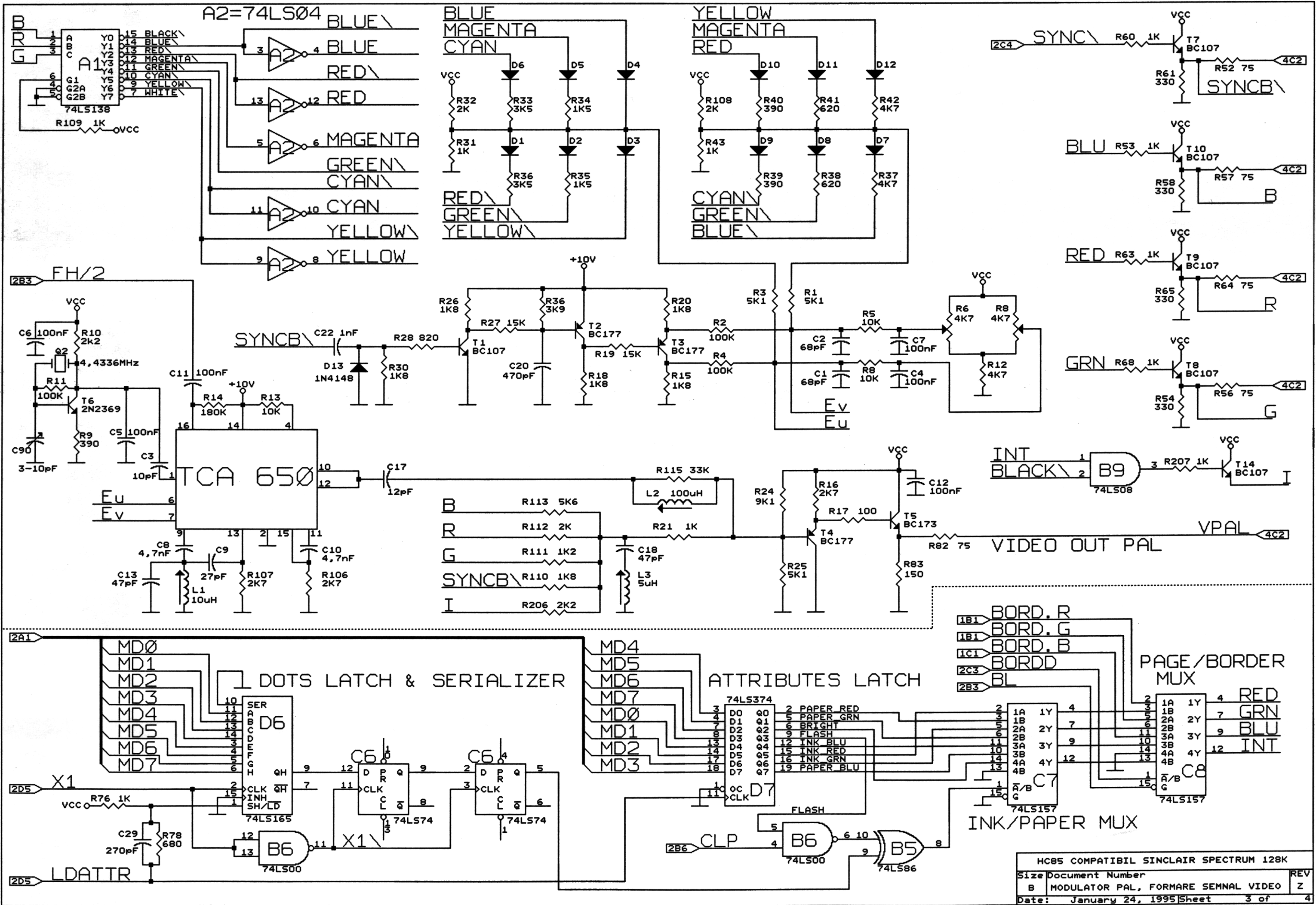
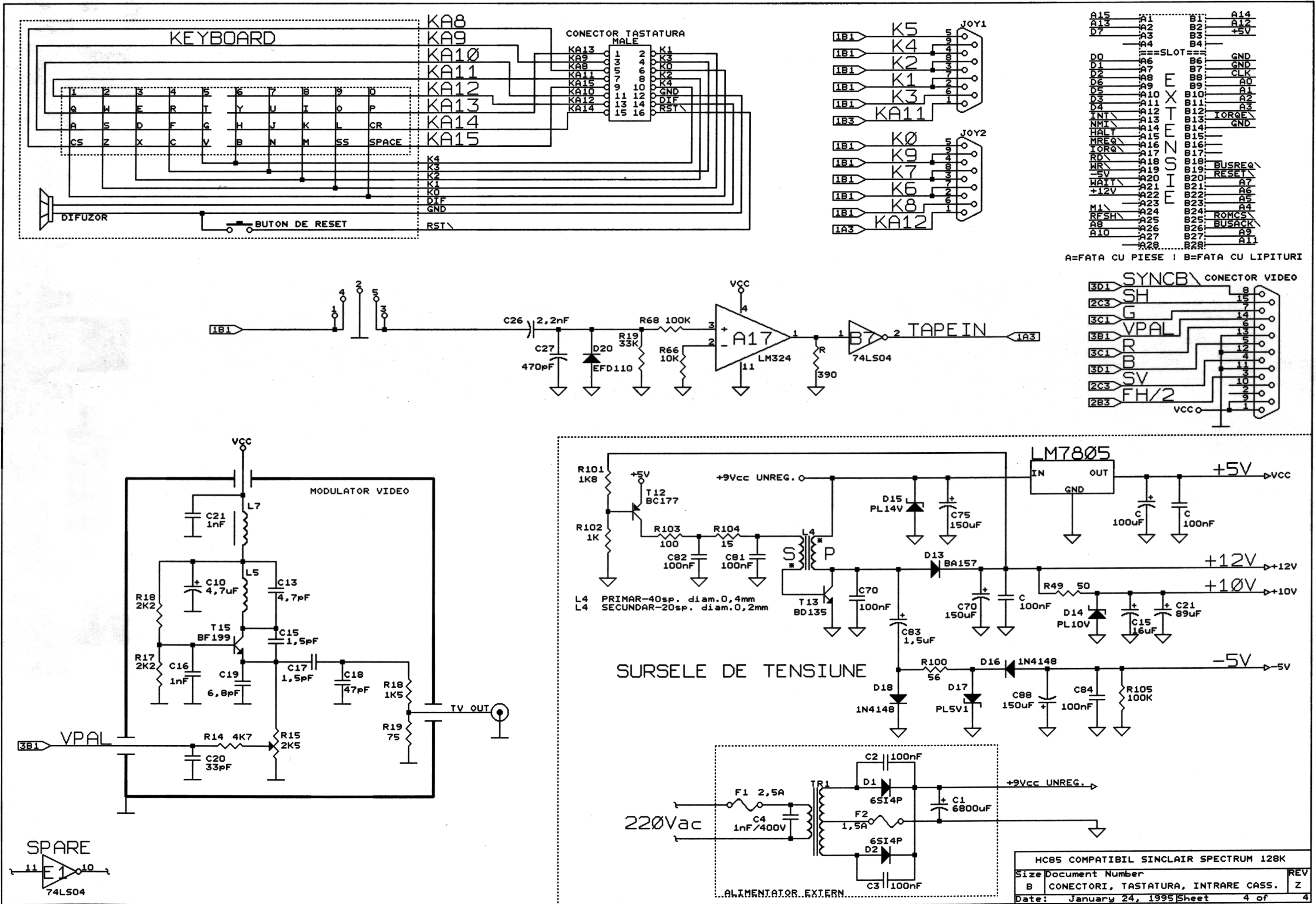


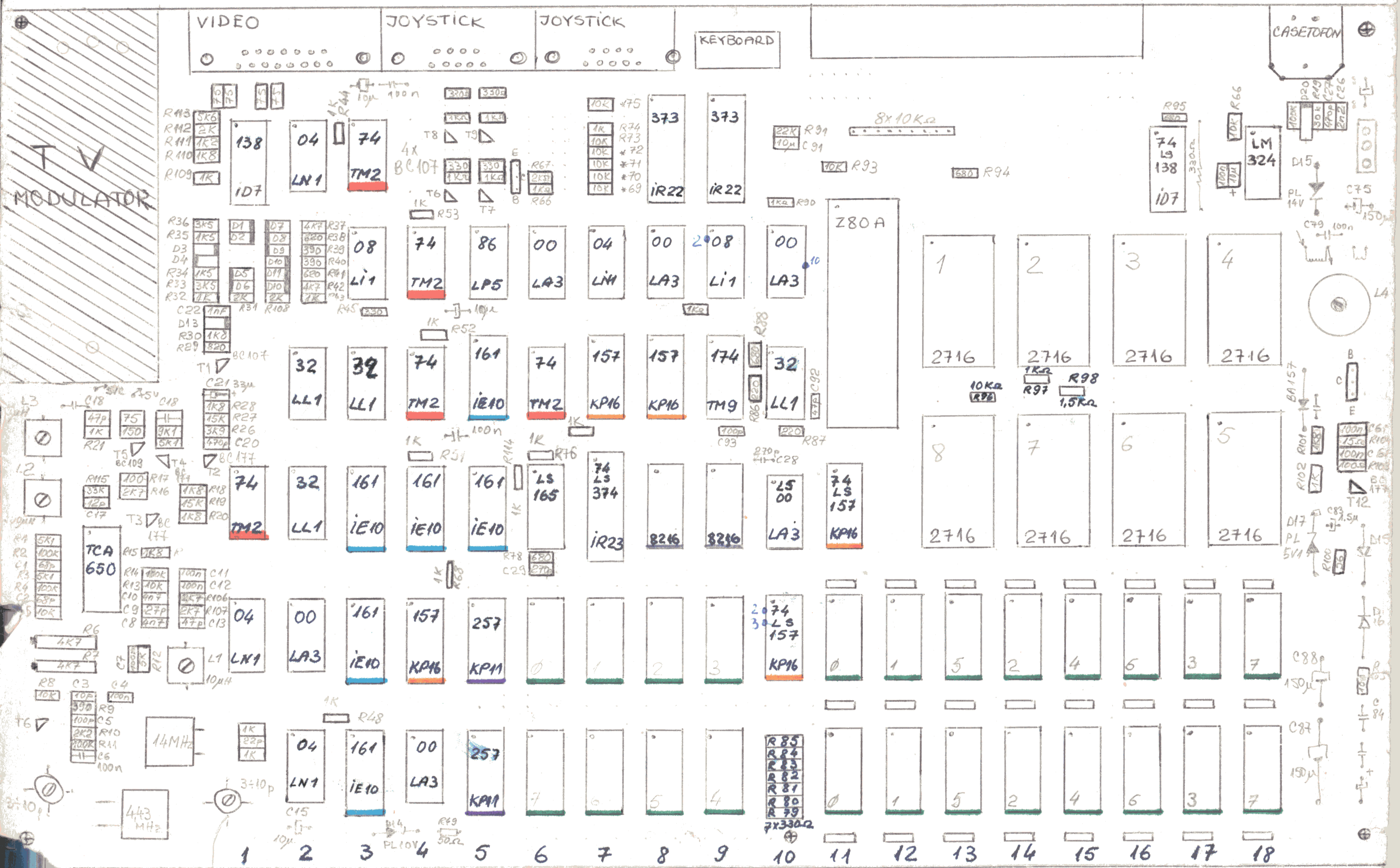
CPU
ROM Ø;1
CTRL.SIGNALS
AND DECODERS
REFSH\
RD\
WR\
MREQ\
M1\
HALT
BUSAK\
IORQ\
IORQE\
WAIT\
INT\
NMI\
RST\
BUSREQ\
CLK
Z8Ø A
27256
A[Ø...15]
D[Ø...7]
R92 9X10K
R93 10K
R94 680
R98 1K5
R96 10K
R97 1K
R91 22K
C91 10uF
MREQ\
ROMCS\
B4
A15
A14
WR\
RD\
B2
74LS00
74LS32
74LS04
SWR\
WR
RD
B2\
R204 1K
A14\
A15\
ROMCS\
R95 680
E2
MREQ\
ACC
PAG4567
B2
A15\
A14
BØ
B2\
A14\
A15
B1
A14*
PAGØ123
A15*
74LS08
NOTA: R200..R203=680 ohm ; D100..D103=1N4148
RASRQ\
MREQ\
RAS\
MUX
CAS\
RD\
WR\
PAG0123
R86 220
C92 47pF
R87 220
C93 100pF
Ccas 68pF
A16
74LS138
R205 680
RESET\
IORQE\
WR\
D5
C9bis
74LS174
B1
B2
B4
B3
BØ
D104 1N4148
D1
D2
D4
D3
DØ
OUT_FEh
BORD.B
BORD.R
BORD.G
BELL
C9
R73 10K
TAPEOUT
R74 1K
R 1K
RAM PAGINILE Ø,1,2,3
2x 74LS157
D1Ø
E1Ø
PA[Ø...7]
PAØ
PA1
PA2
PA3
PA4
PA5
PA6
PA7
8X4164
RAS\
CAS\
SWR\
D0-F11
D1-F12
D2-F14
D3-F17
D4-F15
D5-F13
D6-F16
D7-F18
.DO.D1.D5.D2.D4.D6.D3.D7.
I/O PORTS AND
ADDRESSES DECODERS
8XEFD110
KA11
KA8
KA9
KA13
KA14
KA15
KA12
KA1Ø
74LS373
A9
R90 1K
CONECTOR
TASTATURA
FEMALE
5X10K
T11
BD135
RST\
BELL
TAPEIN
R68 1K
R67 2K
R98 1K
K[Ø...4]
A5
AØ\
IN_FEh
OUT_FEh
B6
B3
B9
B7
HC85 COMPATIBIL SINCLAIR SPECTRUM 128K
Size B
Document Number
CPU;ROM;RAM PAG 0,1,2,3;I/O
REV Z
Date: January 24, 1995
Sheet 1 of 4



14MHz
Q1
C89
3-10pF
R46 1K
R47 1K
C14
22pF
74LS04
14MHz
VCC
R48
1K
F3
74LS161
X1
X2
X3\
X3
X4
X4\
LDATTR
3A8
E1
F2
B6
74LS00
R114 1K
D5
D4
D3
E3
X4\
X5
X6
X7
X8
X9\
X9
X10
Y0
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
R51
1K
R44
1K
R52 1K
R88
680
INT\
1D8
IORQE\
1C6
A3
74LS74
C5
CLP
3A4
REQ\
ACC
1D1
B4
R53 1K
B3
74LS08
R45
330
CLK
1C8
REQ
REQ\
C4
C3
74LS32
SEL\
X7
X8
D2
SH
4C2
B5
74LS86
SYNC
XXX
Creq
270pF
A2
SV
SYNC\
3D2
E2
C4
BORDD
3B2
D1
BL
X6
FH/2
3C8
WR
1D3
B8
VWR\
RASRQ\
VRAS\
B7
F4
VCAS\
RD
PA[0...7]
1B6
8X330ohm
R83
R79
R81
R84
R82
R80
R85
R+2
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
VA0
VA1
VA2
VA3
VA4
VA5
VA6
VA7
E5
F5
2x 74LS257
8x4164
D0-E7
D1-F7
D2-E8
D3-F8
D4-E9
D5-F9 D7.D0.D2.D4
D6-F6
D7-E6 D6.D1.D3.D5
D9
D8
8216
MD4
MD0
MD7
MD5
MD3
MD1
MD6
MD2
MD[0...7]
3B8
D5
D7
D0
D4
D2
D6
D1
D3
1C5
YA
YB
YC
YD
XY
E4
74LS157
HC85 COMPATIBIL SINCLAIR SPECTRUM 128K
Size B
Document Number
TIMING;AUT.VIDEO;ARBITRAJ;RAM4,5,6,7
REV Z
Date: January 18, 1995
Sheet 2 of 4


A2=74LS04
B
R
G
A1
74LS138
BLACK\
BLUE\
RED\
MAGENTA\
GREEN\
CYAN\
YELLOW\
WHITE\
R109 1K
VCC
BLUE\
BLUE
RED\
RED
MAGENTA
GREEN\
CYAN\
CYAN
YELLOW\
YELLOW
BLUE
MAGENTA
CYAN
D6
D5
D4
R32 2K
R33 3K5
R34 1K5
R31 1K
D1
D2
D3
R36 3K5
R35 1K5
RED\
GREEN\
YELLOW\
YELLOW
MAGENTA
RED
D10
D11
D12
R108 2K
R40 390
R41 620
R42 4K7
R43 1K
D9
D8
D7
R39 390
R38 620
R37 4K7
CYAN\
GREEN\
BLUE\
SYNC\
R60 1K
T7 BC107
R61 330
R52 75
SYNCB\
BLU
R53 1K
T10 BC107
R58 330
R57 75
B
RED
R63 1K
T9 BC107
R65 330
R64 75
R
GRN
R68 1K
T8 BC107
R54 330
R56 75
G
FH/2
+10V
R26 1K8
R36 3K9
R20 1K8
R27 15K
T2 BC177
T3 BC177
SYNCB\
C22 1nF
R28 820
T1 BC107
D13 1N4148
R30 1K8
C20 470pF
R19 15K
R18 1K8
R15 1K8
R2 100K
R4 100K
R3 5K1
R1 5K1
C2 68pF
C1 68pF
R5 10K
R8 10K
C7 100nF
C4 100nF
R6 4K7
R8 4K7
R12 4K7
Ev
Eu
C6 100nF
R10 2k2
Q2
4,4336MHz
R11 100K
T6 2N2369
R9 390
C5 100nF
C90 3-10pF
C3 10pF
C11 100nF
R14 180K
R13 10K
TCA 65Ø
C17 12pF
R115 33K
L2 100uH
Eu
Ev
C8 4,7nF
C9 27pF
C10 4,7nF
C13 47pF
L1 10uH
R107 2K7
R106 2K7
B
R113 5K6
R
R112 2K
G
R111 1K2
SYNCB\
R110 1K8
I
R206 2K2
R21 1K
C18 47pF
L3 5uH
R24 9K1
R16 2K7
R17 100
T4 BC177
T5 BC173
R25 5K1
C12 100nF
R83 150
R82 75
VIDEO OUT PAL
VPAL
INT
BLACK\
B9
74LS08
R207 1K
T14 BC107
I
MDØ
MD1
MD2
MD3
MD4
MD5
MD6
MD7
DOTS LATCH & SERIALIZER
D6
74LS165
C6
74LS74
X1
R76 1K
C29 270pF
R78 680
B6
74LS00
X1\
LDATTR
MD4
MD5
MD6
MD7
MDØ
MD1
MD2
MD3
ATTRIBUTES LATCH
74LS374
D7
PAPER RED
PAPER GRN
BRIGHT
FLASH
INK BLU
INK RED
INK GRN
PAPER BLU
FLASH
CLP
B6
74LS00
B5
74LS86
BORD.R
BORD.G
BORD.B
BORDD
BL
C7
74LS157
INK/PAPER MUX
PAGE/BORDER MUX
C8
74LS157
RED
GRN
BLU
INT
HC85 COMPATIBIL SINCLAIR SPECTRUM 128K
Size B
Document Number
MODULATOR PAL, FORMARE SEMNAL VIDEO
REV Z
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KEYBOARD
CONECTOR TASTATURA MALE
DIFUZOR
BUTON DE RESET
JOY1
JOY2
SLOT
EXTENSIE
A=FATA CU PIESE ; B=FATA CU LIPITURI
CONECTOR VIDEO
TAPEIN
LM324
74LS04
MODULATOR VIDEO
TV OUT
VPAL
SPARE
LM7805
SURSELE DE TENSIUNE
L4 PRIMAR-40sp. diam.0,4mm
L4 SECUNDAR-20sp. diam.0,2mm
+9Vcc UNREG.
+5V
+12V
+10V
-5V
220Vac
ALIMENTATOR EXTERN
HC85 COMPATIBIL SINCLAIR SPECTRUM 128K
Size B
Document Number
CONECTORI, TASTATURA, INTRARE CASS.
REV Z
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VIDEO
JOYSTICK
JOYSTICK
KEYBOARD
CASETOFON
TV
MODULATOR
Z80A
138
iD7
04
LN1
74
TM2
373
iR22
373
iR22
74 LS 138
iD7
LM 324
08
Li1
86
LP5
00
LA3
04
LN1
00
LA3
08
Li1
00
LA3
1
2
3
4
2716
2716
2716
2716
32
LL1
32
LL1
74
TM2
161
iE10
74
TM2
157
KP16
157
KP16
174
TM9
32
LL1
8
7
6
5
2716
2716
2716
2716
74
TM2
32
LL1
161
iE10
161
iE10
161
iE10
LS 165
74 LS 374
iR23
8216
8216
LS 00
LA3
74 LS 157
KP16
TCA 650
04
LN1
00
LA3
161
iE10
157
KP16
257
KP11
74 LS 157
KP16
14MHz
4,43 MHz
04
LN1
161
iE10
00
LA3
257
KP11
R85
R84
R83
R82
R81
R80
R79
7x330Ω
8x10KΩ
4x BC107
BC107
BC109
BC177
L1
L2
L3
L4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18